

IN THE CLAIMS

The claims have been amended as follows:

CLAIMS

1. (Original) Metal detector comprising transmitting coils, receiving coils and an electronic processing circuit (30) adapted to detect variations in signals received by the receiving coils in relation to a reference value, characterised in that it also includes a test module comprising selection means (40) for detecting a test request, and control means (50), used when a test request by the selection means (40) is detected, for comparing the signals from the receiving coils, at the time of the subsequent passing of a standard reference object through the detector, with a predetermined response.
2. (Original) Detector according to Claim 1 characterised in that the standard reference object is a metal sphere.
3. (Currently Amended) Detector according to ~~one of Claims 1 or 2~~ Claim 1, characterised in that the test module is adapted to carry out control operations for each of the detector's channels.
4. (Currently Amended) Detector according to ~~one of Claims 1 to 3~~ Claim 1, characterised in that the selection means (40) are selected in the group comprising: a protected access button, a card reader, a detector of a code entered on a keyboard.

5. (Currently Amended) Detector according to ~~one of Claims 1 to 4~~Claim 1, characterised in that the selection means (40) are adapted to load and use a control programme specific to the request detected.

6. (Currently Amended) Detector according to ~~one of Claims 1 to 5~~Claim 1, characterised in that the selection means (40) are adapted to load and use a control programme specific to the request detected, selected from several available control programmes.

7. (Currently Amended) Detector according to ~~one of Claims 1 to 6~~Claim 1, characterised in that the selection means (40) are adapted to load and use a control programme specific to the request detected, selected from 3 available control programmes: 1) an automatic test and recalibration procedure for the detection parameters if necessary, 2) a full test procedure and 3) a simple and quick test procedure.

8. (Currently Amended) Detector according to ~~one of Claims 1 to 7~~Claim 1, characterised in that the control means (50) comprise a display module (52), a recording module (54), a comparison module (56), an output module (58) and a central processing unit (59) which controls the assembly.

9. (Original) Detector according to Claim 8 characterised in that the display module (52) is adapted to send signals guiding the operator in the sequencing of the test programme.

10. (Currently Amended) Detector according to ~~one of Claims 8 or 9~~Claim 8, characterised in that the display module (52) is adapted to give signals to proceed with passing the standard reference object through, interrupting this passage, and possibly repeating the procedure at a different height.

11. (Currently Amended) Detector according to ~~one of Claims 8 to 10~~Claim 8, characterised in that the display module (52) is adapted to give signals indicating the height at which the standard reference object must be moved.

12. (Currently Amended) Detector according to ~~one of Claims 8 to 11~~Claim 8, characterised in that the output means (58) provide an output signal representative of the test result.

13. (Currently Amended) Detector according to ~~one of Claims 8 to 12~~Claim 8, characterised in that the output means (58) are adapted to modify the detection parameters if the signals detected from the receiving coils do not fall within a given predetermined response tolerance range in the context of a calibration request.

14. (Original) Detector according to Claim 13 characterised in that the test module is adapted to carry out calibration operations for each of the detector's channels.

15. (Original) Test procedure for metal detectors characterised in that it includes, after a stage (60) of sending a test request, stages comprising passing a known standard reference object

through the detector (72, 82, 92), and comparing (76, 86, 96) the signals from the receiving coils at the time of this passing, with a predetermined response.

16. (Original) Procedure according to Claim 15 characterised in that the standard reference object is a metal sphere.

17. (Currently Amended) Procedure according to ~~one of the Claims 15 to 16~~ Claim 15, characterised in that the test request sending stage (60) comprises the selection from several available programmes.

18. (Currently Amended) Procedure according to ~~one of Claims 15 to 17~~ Claim 15, characterised in that the test request sending stage (60) comprises the selection from three available programmes: 1) an automatic test and recalibration procedure for the detection parameters if necessary, 2) a full test procedure and 3) a simple and quick test procedure, as will be shown in more detail later.

19. (Currently Amended) Procedure according to ~~one of Claims 15 to 18~~ Claim 15, characterised in that it comprises sending signals (72, 82, 92) guiding the operator in the sequencing of the test programme.

20. (Currently Amended) Procedure according to ~~one of Claims 15 to 19~~ Claim 15, characterised in that it comprises sending signals (72, 82, 92) indicating the height at which the standard reference object must be moved.

21. (Currently Amended) Procedure according to ~~one of Claims 15 to 20~~Claim 15, characterised in that it comprises a stage (792) consisting of modifying the detection parameters if the signals detected from the receiving coils do not fall within a given predetermined response tolerance range.

22. (Currently Amended) Procedure according to Claim 21, characterised in that the modification stage (792) ~~consists of~~includes modifying the amplification factor of the signals from the receiving coils.

23. (Currently Amended) Procedure according to ~~one of Claims 15 to 22~~Claim 15, characterised in that it includes a calibration procedure (70) comprising a single passing through of the reference object, at floor level.

24. (Currently Amended) Procedure according to ~~one of Claims 15 to 23~~Claim 15, characterised in that it includes a test procedure (80, 90) ~~consisting of~~including carrying out several successive passes of the reference object, at different heights.

25. (Original) Procedure according to Claim 24, characterised in that a test procedure (80) comprises four successive passes of the reference object, at different heights.

26. (Currently Amended) Procedure according to ~~one of Claims 24 or 25~~Claim 15, characterised in that a test procedure (90) comprises two successive passes of the reference object, at different heights.

27. (Currently Amended) Procedure according to ~~one of Claims 15 to 26~~Claim 15, characterised in that the trajectory of the standard reference object is a rectilinear trajectory (T) and at a constant height for each respective pass.

28. (Currently Amended) Procedure according to ~~one of Claims 15 to 27~~Claim 15, characterised in that the trajectory of the standard reference object is effected halfway between two panels (20, 22) making up the detector.